

5

ABSTRACT

10

A method of synthesizing a polynucleotide which can, for example, be used during fabrication of an array. A second nucleoside is coupled to a first nucleoside through a phosphite linkage, with the second nucleoside having a hydroxyl protecting group that is a non-carbonate protecting group. The product of the foregoing step is exposed to a composition which both oxidizes the formed phosphite to a phosphate and deprotects the protected hydroxyl of the coupled nucleoside. The method has particular application to fabricating an addressable array of polynucleotides on a substrate which carries substrate bound moieties each with a hydroxyl group.

15

20

25